CELL CALCIUM

Volume 17 Contents

Number 1 January 1995	
Evidence for inositol tetrakisphosphate-activated Ca ²⁺ influx pathway refilling inositol trisphosphate-sensitive Ca ²⁺ stores in hamster eggs H. Shirakawa and S. Miyazaki	1
Thapsigargin protects human erythrocyte Ca ²⁺ -ATPase from proteolysis C.O. Bewaji and A.P. Dawson	14
Interplay of glucose-stimulated Ca^{2+} sequestration and acetylcholine-induced Ca^{2+} release at the endoplasmic reticulum in rat pancreatic β -cells N. Hamakawa and T. Yada	21
Staurosporine enhances Ca ²⁺ entry induced by depletion of intracellular Ca ²⁺ stores in rat parotid acinar cells <i>Y. Tojyo, A. Tanimura, Y. Matsumoto and H. Sugiya</i>	32
Multiple intracellular Ca ²⁺ pools exist in human foreskin fibroblast cells: the effect of BK on release and filling of the non-cytosolic Ca ²⁺ pools L.B. Baumgarten, H.C. Lee and M.L. Villereal	41
A mathematical model of agonist-induced propagation of calcium waves in astrocytes B.J. Roth, S.V. Yagodin, L. Holtzclaw and J.T. Russell	53
Distribution of plasma membrane Ca ²⁺ -ATPase and inositol 1,4,5-trisphosphate receptor in human platelet membranes W.L. Dean and T.M. Quinton	65
Immunological stimulation of single rat basophilic leukemia RBL-2H3 cells co-activates Ca²+-entry and K⁺-channels M. Gericke, O. Dar, G. Droogmans, I. Pecht and B. Nilius	7
Number 2 February 1995	
Differences in uptake, storage and release properties between inositol trisphosphate-sensitive and -insensitive Ca ²⁺ stores in permeabilized pancreatic acinar cells F.H.M.M. Van de Put, P. Nàgy, J.J.H.H.M. De Pont and P.H.G.M. Willems	8
Introduction of calcium buffers into the cytosol of <i>Dictyostelium discoideum</i> amoebae alters cell morphology and inhibits chemotaxis N. Unterweger and C. Schlatterer	9
Review: Ca ²⁺ -mobilizing receptors for ATP and UTP A. D. Conigrave and L. Jiang	11
Serotonin elevates intracellular Ca ²⁺ in rat choroid plexus epithelial cells by acting on 5-HT _{2C} receptors J.A. Watson, A.C. Elliott and P.D. Brown	12
Effect of phorbol ester on phosphoinositide hydrolysis and calcium mobilization induced by endothelin-1 in cultured canine tracheal smooth muscle cells C. M. Yang, R. Ong, Y-C. Chen, J-T. Hsieh, H-L. Tsao and C-T. Tsai	12
IP ₃ receptor purified from liver plasma membrane is an (1,4,5)IP ₃ activated and (1,3,4,5)IP ₄ inhibited calcium permeable ion channel M. Mayrleitner, R. Schäfer and S. Fleischer	14
Thapsigargin induces cytoplasmic free Ca ²⁺ oscillations in mouse oocytes Y. M. Lawrence and K. S. R. Cuthbertson	15

Number 3 March 1995	
Differences in features of calcium transients between the nucleus and the cytosol in cultured heart muscle cells: analyzed by confocal microscopy T. Minamikawa, A. Takahashi and S. Fujita	165
The regulation of leukotriene D₄-induced calcium influx in human epithelial cells involves protein tyrosine phosphorylation E. Grönroos, Å. Schippert, M. Engström and A. Sjölander	177
Receptor-mediated calclum signals in astroglia: multiple receptors, common stores and all-or-nothing responses Y. Shao and K. D. McCarthy	187
IBMX induces calcium release from intracellular stores in rat sensory neurones Y. Usachev and A. Verkhratsky	197
Changes in Ca ²⁺ concentration in phorbol ester and thapsigargin treated glioma C6 cells. The role of protein kinase C in regulation of Ca ²⁺ entry J. Barańska, V. Chaban, M. Czarny and P. Sabala	207
In vivo labelling of L-type Ca ²⁺ channels by fluorescent dihydropyridine: correlation between ontogenesis of the channels and the acquisition of neural competence in ectoderm cells from <i>Pleurodeles walti</i> embryos C. Leclerc, A-M. Duprat and M. Moreau	216
Chaos in intracellular Ca ²⁺ oscillations in a new model for non-excitable cells P. Shen and R. Larter	225
Nuclear calmodulin responds rapidly to calcium influx at the plasmalemma F. Zimprich, K. Torok and S. R. Bolsover	233
Number 4 April 1995	
Rat basophilic leukemia cells as model system for inositol 1,4,5-trisphosphate receptor IV, a receptor of the type II family: functional comparison and immunological detection J.B. Parys, H. De Smedt, L. Missiaen, M.D. Bootman, I. Sienaert and R. Casteels	239
Possible regulation of capacitative Ca ²⁺ entry into colonic epithelial cells by NO and cGMP G. Bischof, J. Brenman, D.S. Bredt and T.E. Machen	250
The 70 kD component of the heart sarcolemmal Na ⁺ /Ca ²⁺ -exchanger preparation is the C-terminal portion of the protein T. Iwata, C. Galli, P. Dainese, D. Guerini and E. Carafoli	263
S-phase independence of parathyroid hormone- induced calcium signalling in primary osteoblast-like cells A. Wiltink and M.P. Bos	270
Complement component C9-dependent cytosolic free Ca ²⁺ rise and recovery in neutrophils 1. Laffafian, E.V. Davies, A.K. Campbell and M.B. Hallett	279
Intracellular Ca ²⁺ oscillations and membrane potential fluctuations in intact human T lympho- cytes: role of K ⁺ channels in Ca ²⁺ signaling J.A.H. Verheugen and H.P.M. Vijverberg	287
Role of epidermal growth factor-induced membrane depolarization and resulting calcium influx in osteoblastic cell proliferation J. Loza, N. Marzec, S. Simasko and R. Dziak	30
Chemical hypoxia increases cytosolic Ca ²⁺ and oxygen free radical formation A.B. Borle and M. Barsic	30
Number 5 May 1995	
Spatial distribution and temporal change in cytosolic pH and [Ca ²⁺] in resting and activated single human platelets H. Ariyoshi and E.W. Salzman	317

Transient increase in cytosolic free calcium evoked by repolarization in type I vestibular hair cells of rats C. Griguer, C. Chabbert, A. Sans and J. Lehouelleur	327
Subplasmalemmal Ca ²⁺ stores of probable relevance for exocytosis in <i>Paramecium</i> . Alveolar sacs share some but not all characteristics with sarcoplasmic reticulum <i>S. Länge, N. Klauke and H. Plattner</i>	335
Increased capacity for store regulated calcium influx in U937 cells differentiated by treatment with dibutyryl cAMP W. Davis, E.L. Halliwell, S.O. Sage and J.M. Allen	345
Quantitative determination of free calcium in subcellular compartments, as probed by Indo-1 and confocal microspectrofluorometry J-M. Millot, L. Pingret, J-F. Angiboust, A. Bonhomme, J-M. Pinon and M. Manfait	354
[Ca ²⁺] _i oscillations in rat chromaffin cells: frequency and amplitude modulation by Ca ²⁺ and InsP ₃ P. D'Andrea and F. Grohovaz	367
Purinoceptor P _{2U} identification and function in human intrahepatic biliary epithelial cell lines L.I. Wolkoff, R.D. Perrone, S.A. Grubman, D.W. Lee, S.P. Soltoff, L.C. Rogers, M. Beinborn, S.L. Fang, S.H. Cheng and D.M. Jefferson	375
Simultaneous measurement of ⁴⁵ Ca outflow and human placental lactogen release from placental explants <i>P. Lebrun, A-M. Vanbellinghen, C. Robyn and S. Meuris</i>	384
Number 6 June 1995	
A re-evaluation of the apparent effects of luminal Ca ²⁺ on inositol 1,4,5-trisphosphate-induced Ca ²⁺ release <i>T.J. Shuttleworth</i>	393
Arachidonate and other fatty acids mobilize Ca ²⁺ ions and stimulate β-glucuronidase release in a Ca ²⁺ -dependent fashion from undifferentiated HL-60 cells D.E. Packham, L. Jiang and A.D. Conigrave	399
Cytoplasmic calcium buffer capacity determined with Nitr-5 and DM-nitrophen N.F. Al-Baldawi and R.F. Abercrombie	409
Calcium diffusion coefficient in Myxicola axoplasm N.F. Al-Baldawi and R.F. Abercrombie	422
Calcium pools in Ehrlich carcinoma cells. A major, high affinity Ca ²⁺ pool is sensitive to both inositol 1,4,5-trisphosphate and thapsigargin A. Gamberucci, R. Fulceri, P. Tarroni, R. Giunti, P. Marcolongo, V. Sorrentino and A. Benedetti	431
Stimulation of platelet-activating factor (PAF) receptors increases inositol phosphate production and cytosolic free Ca ²⁺ concentrations in N1E-115 neuroblastoma cells M. Diserbo, F. Cand, M. Ziade and J. Verdetti	442
IP ₃ -mediated cytosolic and nuclear calcium elevation in NRK-52E cells using 'caged' GPIP ₂ M.A. Davis, S.H. Chang and B.F. Trump	453
Signal transduction of adipokinetic hormones involves Ca ²⁺ fluxes and depends on extracellular Ca ²⁺ to potentiate cAMP-induced activation of glycogen phosphorylase S.F. Vroemen, W.J.A. Van Marrewijk, C.C.J. Schepers and D.J. Van der Horst	459
Subject Index to Volume 17	469
Author Index to Volume 17	473